

# Research on the Construction of Characteristic Towns with Intellectual Property Based on NEG Theory—— Take Anhui Province as an example

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## Abstract

Characteristic towns with intellectual property are specific functional areas or centres with intellectual property rights and relying on intellectual property rights within a certain space. They are the product of the increasing integration of intellectual property and characteristic towns. This article takes Anhui Province as the research object, uses NEG Theory to explore theoretically the construction of intellectual property characteristic towns, combines the construction experience of Shenzhen and Wuhan, and proposes policies from five perspectives: ideological understanding, organizational structure, spatial distribution, resource sharing, and judicial protection. The suggestion has certain reference significance.

**Keywords:** New Economic Geography ; Intellectual Property; Characteristic Town

## 1. Introduction

The characteristic town is a brand-new carrier for regional economic transformation and upgrading. It is an upgraded version of the “block economy,” and intellectual property rights bred the new economic growth level of the future. On February 21, 2016, General Secretary Xi Jinping made an important directive: The new urbanization construction must stand at a new starting point and make new progress. We must adhere to the development concept of innovation, coordination, green, openness, and sharing as the guideline. With people's urbanization as the core, we should pay more attention to raising the urbanization rate of household registration, pay more attention to the equalization of basic public services in urban and rural areas, pay more attention to the environment, livability and historical heritage, pay more attention to improve people's sense of well-being and happiness. Under the background of implementing Xi's instructions and promoting the implementation of innovation-driven development strategies, implement the “Opinions of the Anhui Provincial People's Government on Accelerating the Construction of Characteristic Towns,” and promoting construction of a batch of distinctive towns, especially those featured in intellectual property is of great significance to the economic transformation and upgrading of Anhui Province.

Characteristic towns with intellectual property refer to the formation of global high-end intellectual property professional services by aggregating global high-end intellectual property resources, thereby helping entrepreneurial innovators realize the value of scientific and technological innovation and form intellectual property protection highlands of the intellectual property industrial chain. In short, it refers to a specific functional area or center that is characterized by intellectual property rights and is based on intellectual property in a certain space. It combines the protection and development of intellectual property with the construction of small towns and is a major innovation in the country's deep implementation of innovation-driven development strategies and the construction of small cities and towns in the context of building a powerful intellectual property country. It is a major decision to speed up the transformation and upgrading of Anhui's economy and to balance urban and rural development.

## 2. Research Summary of New Economic Geography and Characteristic Towns

### 2.1 New economic geography

Characteristic town with intellectual property refer to a specific functional area or center that is characterized by intellectual property rights and is based on intellectual property in a certain space. The construction of intellectual property towns needs to follow the rules of industrial clusters to some extent. Industrial cluster theory has undergone continuous evolution from Adam Smith's theory of division of labor and cooperation, to

Marshall's scale economy theory, and then to industrial location theory and technological innovation theory. The so-called industrial cluster, Michael Porter(1998) thinks it means a phenomenon that in a specific field (usually dominated by a dominant industry), a large number of closely-connected companies and related supporting organizations gather in space and form a strong and sustainable competitive advantage. However, after the industrial clusters reach a certain level, due to the large scale, "negative externalities" have begun to emerge, and problems such as serious product homogeneity and low-price malicious competition are likely to occur. In this regard, although characteristic towns with intellectual property rights need to follow the rules of industrial clusters, they are not entirely necessary because, from a structural point of view, characteristic towns with intellectual property are exquisite and there are no adverse effects caused by industrial clusters. In this regard, the viewpoint of the New Economic Geography School (NEG) was introduced and applied.

The New Economic Geography Theory (NEG) is proposed by Krugman, Fujita Changjiu et al in the face of background of the global economic globalization and the development of regional integration, the mainstream economic theory has encountered more and more problems in interpreting the current economic phenomenon. It is based on the increase of marginal revenue, imperfect competition and path dependence, and expands and analyzes economic phenomena such as spatial agglomeration and globalization. New economic geography has absorbed the contents of space economy related to urban economics and economic location theory, and combined with the theoretical innovation of the theory of imperfect competition and increase of income in the industrial organization theory, it is a form of "space economy", so it is called "Space Economics." There are many studies on the interpretation of new economic geography and comparisons with orthodox economic geography, such as the assumptions, research ideas, research contents and development trends of Hu Zhiding et al.(2013)from the perspectives of economics and geography on new economic geography. Such comparative analysis point out that economics and geography learn from each other and the integration of the importance of the development of new economic geography. Liang Bin et al.(2014) pointed out that the orthodox economic geography gradually abandoned the traditional location theory during the development process, and the new economic geography is the inheritance and innovation of classical location theory. Both pay attention to regional space research, but both methodologies and regional scales of concern are different. This article mainly adopts the views of Krugman et al.

The main contents of the study of the New Economic Geography can be roughly divided into two aspects: the spatial agglomeration of economic activities and the driving force of regional growth agglomeration(Fujita 1988).

First, the spatial concentration of economic activities. The main contents of the spatial agglomeration discussion are three: revenue increase, spatial aggregation and path dependence.

The first is increasing returns. In economics, there are three manifestations of changes in income with scale: increasing returns, constant returns, and diminishing returns. The increase in returns is relative to the constant returns and diminishing returns. The increasing returns have new meanings when the increase in returns is linked to the geographical location. Krugman believes that increasing returns is essentially a regional phenomenon. Its core idea is that even if the two regions are very close to each other in terms of natural conditions, it may be due to some accidental factors (such as historical events) that led the industry to start agglomeration in one place. Due to the increasing effect of economic forces, may not lead to a market agglomeration as the transaction costs between regions are not large enough to divide the market.

Followed by space gathering. Spatial aggregation is closely related to increasing returns. Specifically, spatial agglomeration is an external manifestation of increasing returns. It mainly refers to the phenomenon that the industrial or economic activity areas are concentrated due to the cost savings brought about by the agglomeration of industries or economic activities. Spatial aggregation is the main factor in the continuous expansion of cities and the formation of regional centers, and its typical performance is regional integration and metropolitan areas (bands). In the study of traditional urban systems, economic geography only assumes the existence of an agglomeration economy, but the new economic geography hopes to explore the self-enhancing ability of spatial agglomeration to explain the fundamental principles of industrial or economic activity agglomeration.

The last is path dependence. Path dependence is mainly used to explain the specialization and trade activities between countries and regions. Path dependence was first proposed by Paul David in 1985 and developed by Krugman et al. A certain historical contingency will enable a certain location to have a certain first-mover advantage in industrial gathering. Once the pattern established by historical contingency is established, this initial model will likely be further strengthened through the process of aggregation based on incremental returns. Fujita believes that path dependence means that there are uncertainties in the places where specific activities take place, and if they are determined by spatial differences, they will produce rigidity.

Second, the driving force for regional growth agglomeration. According to the new economic geography, the scope of the market's role, the mobility of the labor force, and the cost of transportation will determine the extent of regional integration of economic activities in space. First, when the scope of the market's role and the flow of labor increase through regional integration, a larger-scale spatial agglomeration will occur, and the gap between the wealth of the central zone and the poor level of the marginal zone will be widened. Phenomenon in reality is also sufficient to prove this theory; Second, if there are factors that are immovable due to language, culture, customs, etc. between regions, then the labor force in the central region and the costs due to crowding will increase, which is conducive to the diffusion of economic activities and will weaken industrial agglomeration.

## *2.2 Characteristic town*

In October 2014, when visiting Yunqi Town, Li Qiang, the governor of Zhejiang Province, put forward: "Let there be more beautiful and unique towns in Hangzhou. There are more than a few innovations in the sky." This is when the concept of a "characteristic town" was first mentioned. The concept of a characteristic towns was proposed in Zhejiang Province, and the current research is mainly centered on the development of characteristic towns in Zhejiang Province. In the understanding of characteristic towns, Min Xueqin(2016) interpreted characteristic towns from the perspectives of industrial economy, cultural tourism, and precise governance, demonstrating the multiple identities of characteristic town; in the construction of characteristic towns, Zhu Yingying(2016) analyzed the current status of characteristic towns of Jiaxing City. The analysis pointed out that speeding up the construction of characteristic towns should handle the three major relationships between characteristic towns and innovation-driven development, transformation and upgrading of clusters, and creation of beautiful villages, and establish four ecosystems of a good governance ecosystem, entrepreneurial innovation ecosystem, natural ecosystems and social and cultural ecosystems, and focus on the five aspects of scientific planning, classification and development, operation and management, agglomeration and transformation, and factor guarantee, providing a complete framework for the construction of characteristic towns; As for the assessment of the town's development level, Wei Longbao et al. (2016)and others mentioned that multiple standards assessments should be carried out, but they have not been specifically implemented; Wu Yizhou et al.(2016)and others have established a relatively complete index system to evaluate characteristic towns from the four dimensions of industry, function, form, and system.

Integrate literature at home and abroad and we can find that the current research on the new economic geography theory focuses on traditional trade, industrial agglomeration, etc. At the same time, the concept of "characteristic town" has been proposed for a short time, and in the current application of the new economic geography theory there is little research on this concept and it cannot reflect the new trend of industrial agglomeration in China in recent years. In addition, the current research on characteristic towns mainly focuses on the upgrading and transformation of traditional industries, and lacks specific industry research on intangible resources such as intellectual property. In view of this, this article analyzes the characteristic towns with intellectual property within the framework of the new economic geography theory, and combines the successful experiences of Shenzhen and Wuhan in this area. Based on this, it proposes corresponding policy suggestion about how to construct characteristic towns with intellectual property in Anhui Province.

## **3.Domestic Experiences in the Construction of Characteristic Towns with Intellectual Property**

Although the concept of characteristic towns has been established and implemented for a certain period of time, the concept of characteristic towns with intellectual property rights is relatively new. There is no research and experience in the construction of characteristic towns with intellectual property. Some local cities such as Sichuan, Tianjin and other places have issued corresponding cultivating plans and work plans. At present, Shenzhen and Wuhan actively implement a number of policies to continuously explore the construction path of characteristic towns with intellectual property. Based on Ahhui's own, understanding of Shenzhen and Wuhan's practices and drawing on the experience of the two cities, it is conducive to the construction and development of Anhui characteristic towns with intellectual property.

### *3.1 Experience in construction of Shenzhen characteristic towns with intellectual property*

Shenzhen, as a window and experimental field for China's reform and opening up, has always firmly adhered to the path of scientific and technological innovation. Scientific and technological innovation has become a shining business card for the city. Scientific and technological innovation can not be separated from the protection of

intellectual property rights, Shenzhen attaches great importance to the strong protection role of intellectual property protection for scientific and technological innovation. On July 11, 2016, the Symposium on characteristic towns with intellectual property was held in Shenzhen. Shenzhen will plan to build a "characteristic town with intellectual property". While laying out the entire ecology of intellectual property, it will use the demonstration role of a small town to promote the construction of a national intellectual property demonstration city in Shenzhen and promote the implementation of innovation-driven development strategies.

Shenzhen has advantages in building characteristic towns with intellectual property. First, Shenzhen has gathered a large number of high-tech industries and enterprises, especially the rapid development of private economy. In the past 30 years, the high-tech industry has gradually developed into the first growth point and the first pillar industry of the Shenzhen economy, forming a leading industry in the electronic information industry, including bio-pharmaceuticals, new energy, and new materials industries. High-tech industrial clusters have emerged such well-known domestic and foreign companies as Huawei, ZTE and Tencent, becoming an important base for the industrialization of high-tech achievements in the country. Second, Shenzhen has a huge intellectual property stock. According to statistics, the number of domestic patent applications submitted by Shenzhen in 2017 was 177,103, an increase of 21.89% year-on-year. At the same time, 94,250 domestic patents were granted, an increase of 25.59% year-on-year; among them, 18,926 were invention patents, an increase of 7.13% year-on-year, accounting for 20.08% of the total authorized amount. In the comparison of national invention patent grants in 2017, Shenzhen ranked 3rd among the large and medium-sized cities in China with 18,928, second only to Beijing and Shanghai. At the same time, of the top ten domestic (excluding Hong Kong, Macao, and Taiwan) companies in China for invention patent grants in 2017, Huawei (2nd) and ZTE (5th) companies from Shenzhen occupy two of them and are ranked top overall. This fully reflects that Shenzhen has a huge stock of intellectual property, and its innovation is powerful. Third, from the perspective of intellectual property practices and operations, Shenzhen's enterprises have a wealth of advantages and experience. Take Huawei as an example. Since 2014, Huawei has signed a total of 200 technical cooperation projects in Europe and participated in 25 EU advanced technology research and development projects. Huawei's patent applications filed at the European Patent Office increased to 1,600, becoming the first Chinese company to submit the number of patent applications filed in Europe to the top five. Patent licensing and cross-licensing as a means of market competition supported Huawei's European strategy steadily moving forward.

According to the plan, Shenzhen characteristic towns with intellectual property Planning will create an "one body, two wings" layout of intellectual property rights with the "Intellectual Property Industry" as the core, forming the "integrated" function center in the middle of the town as the "subject", and the Eastern Cultural Copyright and Western Industrial Property as the scientific layout of "Two Wings". The functional demonstration complex in the center will include seven aspects of intellectual property management, transactions, services, education, think tanks, culture, and finance. From the perspective of the service module, it includes the agency's aggregation area, early warning center, and overseas IP layout design center and big data center and other comprehensive services.

### *3.2 Experience in construction of Wuhan characteristic towns with intellectual property*

Wuhan is one of the first batch of national intellectual property demonstration cities in China and has rich intellectual property resources. In recent years, Wuhan City has vigorously promoted the construction of a strong intellectual property city and achieved great success. In March 2017, Daijiashan Science and Technology Pioneering Park in Jiangyan District of Wuhan City proposed to build the first characteristic town with intellectual property in Hubei Province and strive to gather 500 companies in five years to form an intellectual property service industry chain and create intellectual property clusters and concentrated areas of intellectual property transformation. Currently, more than 200 enterprises in the park have more than 1,700 pieces of intellectual property rights, and have authorized more than 100 invention patents. Each year, the number of various types of intellectual property applications exceeds 200, which is rich in intellectual property resources.

The characteristic town with intellectual property of Daijiashan will focus on the introduction of IP source enterprises and the promotion of the transformation of intellectual property rights. It will strive to gather 500 companies in 5 years, relying on Hubei Province's IPR dual service base, Hubei Intellectual Property Service Workstation, and Wuhan intellectual property venture base construction to consolidate the park's characteristic intellectual property service system such as the first intellectual property service station of the Hubei Provincial was awarded to Daijiashan technology business incubator and accelerator by intellectual property development center of Hubei Province to provide enterprises with property information applications and business training.

With services, enterprises can apply for patents at one-stop in the park. At the same time, they will launch a series of targeted and special services for entrepreneurs: carry out extensive IPR promotion, provide entrepreneurs with various forms of thematic activities and professional training, and enhance the ability of intellectual property innovation; employ intellectual property instructors in all fields, one on one in-depth guidance of enterprises in the first line of the enterprise to carry out intellectual property excavation and layout, and gather a group of high-quality intellectual property intermediary service organizations to form a complete set including "IPR business review, agency services, early warning analysis, data utilization, legal aid, and propaganda training". The intellectual property service industry chain will build the characteristic town with intellectual property of Daijiashan into an intellectual property gathering area and an intellectual property transformation dense area, forming an intellectual property entrepreneurship incubator chain.

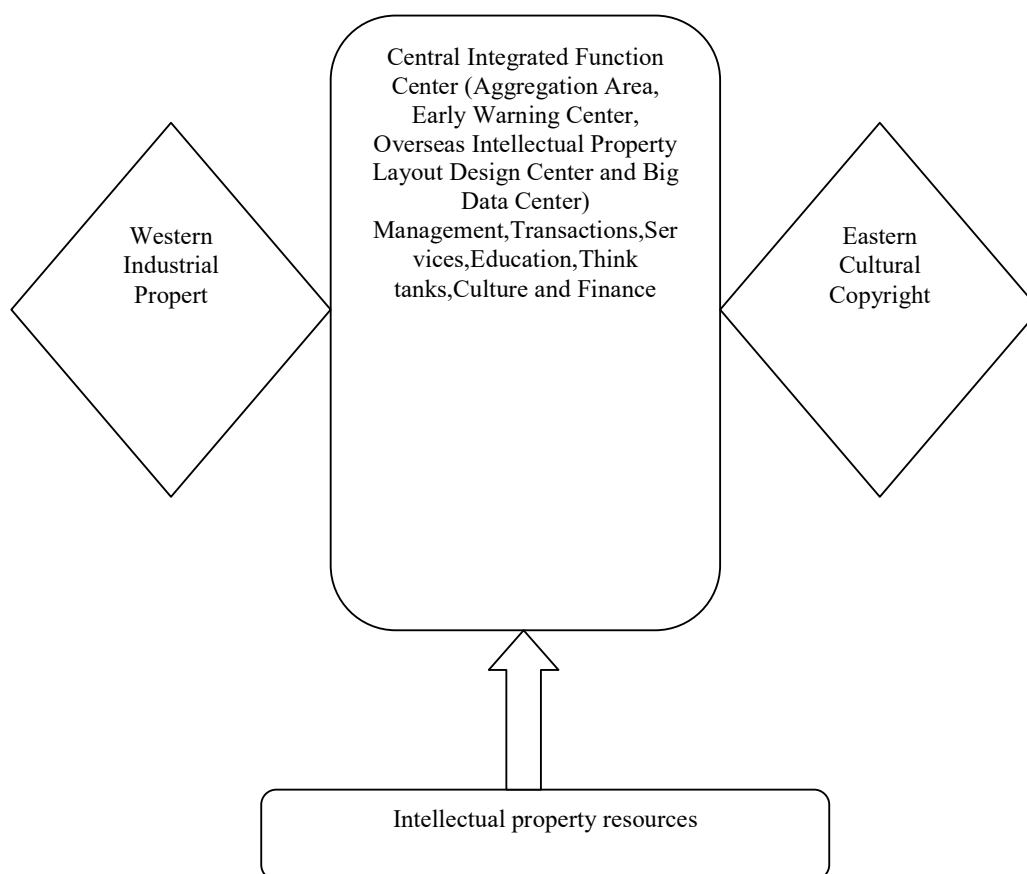


Figure 1. The layout of the "one-body, two-wings" Shenzhen characteristic towns with intellectual property with "Intellectual Property Industry" as the core

At the same time, through patents and trademark double-sweeping projects and the invention patent double-up plan, full subsidies are granted for invention patents and trademarks filed by companies, of which, companies that have applied for invention patents for the first time can enjoy RMB 1,000 to 6,000 yuan in full subsidies without paying out of their own pockets; companies applying for trademarks can enjoy 100,000 to 500,000 yuan subsidies. In addition, Intellectual property makers settling in the park will enjoy reductions and preferential treatment in office space rentals, apartment rentals, utilities, etc. It will fully guide corporate technology innovation and continue to innovate, continuously improve the company's innovation capability, and strive to

achieve 95% of the enterprises have intellectual property rights and the number and quality of intellectual property rights of the enterprises settled in are doubled by 2020.

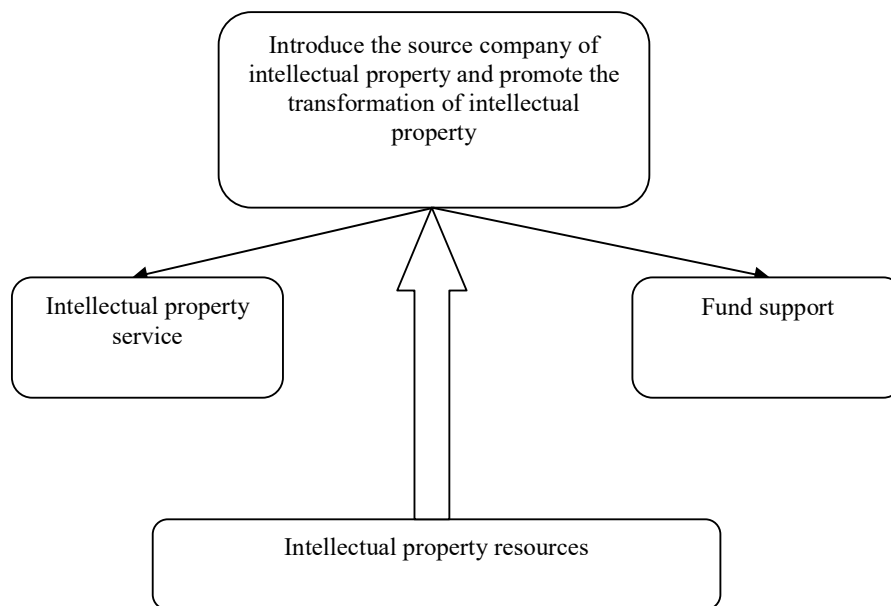


Figure 2. The pattern of Wuhan characteristic town with intellectual property of intellectual property source enterprise and promoting the transformation of intellectual property as the core

#### 4. Countermeasures for the Construction of Characteristic Town with Intellectual Property in Anhui Province

Through sorting out Shenzhen and Wuhan's practice of building a characteristic town of intellectual property, we can draw the common ground of the two cities. First, Shenzhen and Wuhan are both the first national intellectual property demonstration cities in China, and they have abundant intellectual property resources. It can lay a solid foundation for the construction of characteristic town of intellectual property; secondly, it forms clusters through the introduction of IPR enterprises, and takes IPR companies as the main body for the construction of characteristic town of intellectual property, giving full play to the scientific and technological innovation role of IPRs. Third, the government has assumed the role of "Waiter". Through financial support and the provision of intellectual property services, the government assisted the city's construction of characteristic town of intellectual property. At the same time, the construction programs of the characteristic town of intellectual property in two cities, particularly in Shenzhen, are worth learning in terms of industrial space layout. Shenzhen promotes intellectual property-related industrial agglomeration through different functional plans in the three regions of East, Central and West, which are characteristic town of intellectual property, and the experience is worth learning from.

Anhui Province also has a solid foundation in the construction of characteristic town of intellectual property. Hefei, the provincial capital, is one of the four major science and education cities in China. Especially after it was approved as the third comprehensive national science center in 2017, it has become a national scientific and technological innovation highland. In addition, Wuhu City is among the first batch of national intellectual property demonstration cities. Based on Anhui's own and drawing lessons from Shenzhen and Wuhan, the following countermeasures are proposed for the construction of characteristic town of intellectual property in Anhui Province:

##### 4.1 Fully understand the important role of characteristic town with intellectual property in transformation and upgrading

The planning and construction of characteristic town with intellectual property is an important functional platform for implementing the five major development concepts of innovation, coordination, green, openness,

and sharing in Anhui Province, and is an important measure to strengthen supply-side reform and continuously increase growth momentum. Science and technology departments at all levels must fully understand the importance of the construction of characteristic town with intellectual property in the reform and development of innovation, and make full use of the platform of hewubeng independent innovation comprehensive experimental zone, and seize the opportunity of the third national comprehensive science center to settle in Hefei, and give full play to science and technology support and leading role, actively participate in and assist the construction of characteristic town with intellectual property, gather innovative talents, transform scientific and technological achievements, create entrepreneurial platforms, create entrepreneurial ecology, and build characteristic town with intellectual property into the important carrier of entrepreneurship and foster and develop emerging industries and the important base for innovation-driven development and leading Anhui's economic transformation and upgrading.

#### *4.2 Building multi-party collaborative governance system*

To build a multi-stakeholder collaborative governance system such as government, corporate, public, and think tanks, the government should play a role in setting up platforms and providing services, and introduce the “PPP” model to build infrastructure and public service platforms. Integrate existing technology resources to support the construction of characteristic town with intellectual property. Innovative investment and financing methods to support enterprises to develop self-development capabilities. Strengthen the system construction and form a quality-oriented competitive incentive mechanism to stimulate the enthusiasm of enterprises in innovation, entrepreneurship, green development and other aspects. It is necessary to take the initiative to track and strengthen the investigation of the construction and development of characteristic town with intellectual property, soliciting technical difficulties, project cooperation, and the introduction of talents to solve the difficulties and problems in the development of characteristic town with intellectual property and enterprises, so as to continuously form innovative agglomerations. The enterprise is the core force of building the town. It should play a decisive role in the allocation of resources, promote its own innovation and development, and continuously improve the industry. The public should actively participate in grassroots participation, reflect actual issues and public needs, and integrate it into the formulation and implementation of public policies. Strengthen the construction of high-end think tanks, continuously innovate the organization's operational forms, establish direct contact mechanisms for demand and supply, information access mechanisms, funding guarantee mechanisms, and improve internal governance mechanisms. It is necessary to build a new type of scientific and technological think tank that serves as an intellectual support and provides advice and suggestions for the development of the town. Through the multidimensional linkage of government, enterprises, the public, and think tanks, a standardized and efficient collaborative governance system is formed.

#### *4.3 Reasonable spatial layout and unified planning*

Characteristic town with intellectual property planning is a comprehensive plan with highly relevant factors. In terms of spatial layout, according to the interpretation of the new economic geography, the development of regional economy and industrial agglomeration is affected by the spatial layout. Therefore, various factors such as population, industry, land, ecology, infrastructure, etc. must be considered in an integrated manner to promote the fusion of industry, culture and community and promote the coordination of industrial chain, innovation chain and talent chain, and organic convergence. In addition, when the mobility of the labor force advocated by the new economic geography increases through regional integration, a larger-scale spatial agglomeration will generate, thus suggest that Anhui Province should pay more attention to the role of the labor force, especially the knowledge workforce in the construction of characteristic town with intellectual property. In particular, in terms of intellectual property rights, different from other characteristic towns, it is more necessary to enrich the knowledge labor force. Therefore, it is necessary to actively introduce high-end innovation and entrepreneurship talents such high-end innovation resources to gather in small towns. Labor force is the most active factor in the development of social economy. The labor force is not only the carrier of knowledge and skills, but also the main body of knowledge creation and technology and skill innovation (Yin Guangwei 2009). The migration and flow of labor force has led to the proliferation or spillover of knowledge, which has enriched the diversity of places of entry and is conducive to innovation and technological development. One of the most important reasons why the United States has a global leader in innovation is that it is the world's largest immigration country. The same situation applies to the analysis of innovation and development in cities such as Beijing, Shanghai and Guangzhou. In addition, encouraging the migration of labor force, especially knowledge workers, will increase

the exchanges between the two places in the place of eviction or migration, and help promote technology spillover from the advantage areas of Anhui Province such as Hefei, Wuhu, etc., to the north region of Anhui province. Some of the displaced labor force maintains close contact with the areas where they lived, and they are called important bridges between cities in Anhui Province.

Therefore, Anhui Province should continue to unceasingly coordinate the regional development, carry out pilot work, and establish relevant systems such as vigorously promoting the development of the talent market and occupational intermediary, gradually encouraging population migration, reducing the barriers to labor migration caused by the incomplete reform of the household registration system, and the differences in regional resource endowments, etc.

#### *4.4 To open up shared resources for characteristic town of intellectual property and strengthen intellectual property creation*

It is necessary to actively guide and support scientific and technological cooperation between characteristic town with intellectual property and universities and scientific research institutes at home and abroad, especially the university of science and technology of China, Hefei university of technology, and the Hefei institute of materials of the Chinese Academy of Sciences within the province. Make full use of the opportunities created by the foundation of quantum information and quantum science and technology innovation institute and fully support the construction of characteristic town with intellectual property. Vigorously attract relevant innovative companies, R&D institutions, service agencies, etc. to settle in towns, build synergistic innovation strategic alliances for production, research, and innovation, and promote innovation and entrepreneurship ecosystems, promote the integration of industrial chains and innovation chains, and promote emerging industries spatially achieve cluster development on the basis of high-end factor agglomeration(Sheng Shihao et al.2016). Actively promote the use of "Internet +", explore and practice a number of new models to adapt to market mechanisms, and promote the integration of Internet technology and characteristic town with intellectual property. The role of "innovation vouchers" should be brought into play to support science and technology enterprises in characteristic town with intellectual property to make full use of the scientific and technological resources of innovation carriers and to strengthen intellectual property creation.

#### *4.5 Strengthening Hefei intellectual property court's judicial protection of characteristic town with intellectual property*

Accompanied with the approval of the Hefei comprehensive national science center and the construction of characteristic town with intellectual property, the Hefei intellectual property court has become increasingly prominent. On August 30, 2017, Hefei intellectual property court was formally established. From September 1, the first-instance civil cases and administrative cases involving patents, technical secrets, etc. that occurred in the province's jurisdiction will all be heard here. The establishment of the intellectual property court was of great significance for the promotion of specialization in intellectual property trials, centralized jurisdiction, and personnel specialization in Anhui Province. It also laid a good foundation for the establishment of the Hefei intellectual property Court, which in turn helped to combat Hefei and even Anhui whole province's intellectual property rights infringement acts to protect the legitimate rights and interests of owners of intellectual property rights and protect the building of characteristic town with intellectual property.

## **References**

- Fujita,M.(1988), "A Monopolistic Competition Model of Spatial Agglomeration: Differentiated Product Approach" .Regional Science and Urban Economies,(18):87—124.
- Hu Zhiding,Ge Yuejing.(2013), " Understanding New Economic Geography " .Geographic Research.32(04):731-743.
- Liang Bin,Deng Zutao,Liang Hui,Mao Yan.(2014), " Regional Space Research:Divergences and Blending between Economic Geography and New Economic Geography" .Economic Geography,34(02):9-13.
- Min Xueqin.(2016), " The Characteristic Town and Its Creation Path from the Perspective of Precise Governance " .Journal of Tongji University(Social Science),27(05):55-60.
- Porter,M. E.(1998), "Clusters and the New Economics of Competition" ,Harvard Business Review.



- Sheng Shihao,Zhang Weiming. (2016), “Characteristic Town: An Industrial Space Organization Form” . Zhejiang Social Sciences,(03):36-38.
- Wei Longbao,Shi Xinjie.(2016), “Some Thoughts and Suggestions on the Construction of Characteristic Towns in Zhejiang province” .Zhejiang Social Sciences,(03):28-32.
- Wu Yizhou,Chen Qianhu,Zheng Xiaohong.(2016), “ The Index System and Evaluation Method for Characteristic Town Development Level” .Planner,32(07):123-127.
- Yin Guangwei.(2009),“Research on Industry Agglomeration Mechanism from the Perspective of New Economic Geography”, *PhD Thesis*, Nankai University.
- Zhu Yingying.(2016),“Research on the Status Quo and Countermeasures of Zhejiang Characteristic Town Construction——Taking Jiaxing City as an Example”.Journal of Jiaxing College,28(02):49-56.